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SANCTUARY COMMENTS



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October 17, 2002

Mr. Craig D. MacDonald, Ph.D., Superintendent  
Stellwagen Bank National Marine Sanctuary  
175 Edward Foster Rd.  
Scituate, MA 02066

Dear Craig:

We offer the following comments on Sanctuary management strategies and on what issues and problems we see as management priorities for the next 5-10 years. It seems sensible for us to comment now and then to continue to advise you and your staff through our role on the Advisory Council.

We were pleased to see that fishermen took the time to attend and to participate, especially in Gloucester and Provincetown - two fishing communities that have Stellwagen Bank at their front doors. You were a first-hand witness to the fear these fishermen have that a revised Sanctuary Plan will in some way further impact their ability to fish. Amendment 13 to the Multispecies FMP has every groundfish fisherman alarmed that they may not survive the new SFA-mandated late-2003 restrictions that could include far-reaching, year-round closures of critical, nearby fishing grounds on which they depend. DMF will oppose those closures and support other alternatives.

Amendment 13 has fisheries habitat considerations as well; therefore, the Sanctuary Plan scoping hearings came at a time when nerves were frayed and tempers were high. Mistrust was and still is widespread. Fisheries managers, and now Sanctuary managers, find ourselves at the center of fishermen's attention because more needs to be done to rebuild overfished stocks and protect fisheries habitat - two responsibilities of the New England Fishery Management Council that will look to the Sanctuary for information and recommendations. Some Amendment 13 options include more Sanctuary territory in the Western Gulf of Maine year-round closure, as recommended by the Habitat Committee. This is not lost on fishermen who feel more valuable fishing grounds will be lost to protect habitat they contend doesn't need protection, such as sand and other bottom incapable of sustaining widespread, high-profile 3-D seascape serving as possible shelter and food for juvenile groundfish.

We suggest the Sanctuary Plan must emphasize regaining trust and demonstrating that Sanctuary staff are very open-minded about how to deal with the issue of impact of fishing gear on the bottom habitat. This can be accomplished by working with fishermen on collaborative research projects designed to identify sensitive bottom habitat and investigate improved fishing gear to reduce or eliminate impact in those areas. From your recent trip with me on the F/V Blue Skies you saw how nets can be designed to

An Agency of the Department of Fisheries, Wildlife & Environmental Law Enforcement  
David M. Peters, *Commissioner*

allow valuable fisheries and markedly reduce net contact with the sea bed. DMF is committed to this sort of research with fishermen.

We suggest the Plan identify DMF, and fishermen, as your Sanctuary research partners with an emphasis on conservation engineering for improved habitat protection. DMF's Conservation Engineering Program is of high priority, and we have plans for significant expansion. With DMF intending to acquire more and better fishing gear-monitoring devices - like the innovative equipment you witnessed in operation - in partnership with the Sanctuary we can tackle common habitat conservation concerns.

Another way to build trust is to acknowledge in the Plan the dependence and economic importance of the Sanctuary to coastal fishing communities such as Provincetown. The Captain of the Blue Skies, Luis Ribas shared his plots of many tows he has made for groundfish and other species on Stellwagen Bank and nearby. Relatively small vessels such as his are very weather-dependent; therefore, Stellwagen is extremely important to Provincetown fishermen. The Sanctuary should convince the fishing industry that its views have at least as much weight as those wanting the Sanctuary, or a portion thereof, as a fishery or ecological reserve, or even a marine wilderness.

We emphasize that commercial fishermen should never be characterized as threats to the Sanctuary. They are part of a multiple-use approach that should involve them in research and monitoring in the best interests of improving fisheries, i.e., fishermen's own welfare, through improved habitat protection. Here's where more Sanctuary formal discussion with the New England Fishery Management Council should occur. The Council has an MPA Committee that could serve as the means for Sanctuary habitat issues to get more attention.

The Sanctuary will need many "eyes on the water," and these can be provided by fishermen (e.g., spotting whale entanglements and improper fishing gear). They can serve as Sanctuary sentinels. They know the Sanctuary and its sea bed. They know how fish move seasonally within and throughout the Sanctuary. They have shared concerns with the Sanctuary, e.g., water quality issues. Tap that knowledge, culture that relationship and confrontation will be far less likely. I may appear repetitive. I am because if I've learned nothing else during my many years as a DMF fisheries manager, I've learned that fishermen have a wealth of knowledge from years of first-hand experience and observations. They want to work with us provided we acknowledge their concerns and we try to accommodate them when and if we can.

On a related issue, we know effect of fishing gear on fisheries habitat is a new and controversial issue. It has emerged, and in a big way. DMF is paying very close attention to this issue. In fact, we have assembled some DMF draft policies on MPAs with mobile gear impact on habitat being addressed. One policy is that DMF does not classify bottom trawling and/or sea scallop dredging as destructive fishing techniques threatening Gulf of Maine marine biodiversity, although DMF does believe there are areas where trawling and sea scallop dredging are ill-advised, and other fishing gear or modified trawls/dredges should be used. Some of those areas might be within the Sanctuary, and we look to Sanctuary staff and research for insights into where those areas can be found.

This brings us to the question of whether the Sanctuary can accept impact of bottom trawling and sea scallop dredging as inevitable and acceptable consequences of catching valuable fish and shellfish and the economic value that catch produces for the

Commonwealth's seafood industry. Are there areas in the Sanctuary where trawling and dredging must be considered unacceptable and, if so, where and why?

A related issue is whether any of the New England Council's Amendment 13 proposed alternatives to minimize impact of fishing on EFH satisfy the Sanctuary's concern about protection of bottom habitat. One option would result in what appears to be a closure of almost one-half the Sanctuary thereby including a "diversity of varied habitats." Sanctuary reaction to this Amendment 13 option will send a clear message to those participating in the on-going Sanctuary Management Plan Review about where the Sanctuary is heading. Will Sanctuary staff want an Amendment 13 focus on hard, complex bottom only or will all the area in the proposed westward extension be supported? How will the Sanctuary position on these options impact the success of the next steps in Management Plan review (e.g., Action Plan development)? Just some food for thought. Also, by supporting this option that opens a large portion of the Western Gulf of Maine Closed Area, the Sanctuary will support a return of fishing to those reopened habitats. Is this what the Sanctuary wants in adjacent federal waters? This is a bit of a tricky issue with Sanctuary policy implications. Give careful thought to this one.

It has been stated that an effect of trawling is removal of significant 3-D structure in some areas important for juvenile cod shelter and food. With great attention being paid to cod, we surmise that some will believe fishing restrictions for habitat protection in the Sanctuary will hasten rebuilding of the Gulf of Maine cod stock. Sanctuary staff already has made that case although after reviewing the research serving as a basis for this conclusion, we suggest the case is not as strong as claimed. For example, analytical assumptions about differential density-dependent mortality rates and differential movement rates among habitat types drove research results. Conclusions were preordained. Moreover, the design of experiments needed to calculate mortality rates was flawed because very limited aquarium space was extrapolated to the open ocean (age zero cod subjected to an age 3 cod predator at a length equal to 60% tank width and 30% of length). Even the authors acknowledged limitations of laboratory experiments for studies of wide-ranging predators. Please don't take these comments in a wrong way. They are important experimental findings that warrant further scrutiny.

Perhaps there will be some benefit to cod rebuilding, although very difficult to quantify because one needs to compare the potential for the Sanctuary to become an important cod nursery area versus other well-documented nursery areas in the Gulf of Maine. The issue is the location of young-of-the-year (age 0) and age 1 juvenile cod in the Gulf of Maine. In particular, where are these ages in relation to the Sanctuary? Is there a shortage of GOM habitat thereby placing more importance on the Sanctuary? DMF research can provide some insights.

According to our biologists who analyzed 22 years of juvenile cod data (ages 0 and 1) collected from eastern Massachusetts' territorial waters, depths less than 90 feet inside coastal headlands of major embayments (Ipswich Bay, Massachusetts Bay, and Cape Cod Bay) offer suitable habitat for successful recruitment. Age 0 cod are up to 15 cm in length. Shoaler areas less than 60 feet are more seasonally important for settlement than deeper strata and are preferred settlement depths. These biologists concluded: "A cod nursery is located off the eastern Massachusetts coastline and within state territorial waters jurisdiction." They also concluded that based on 1963-1997 data, age 0 cod are rarely caught in the NEFSC spring offshore survey including Stellwagen Bank. Autumn

data showed similar results. All these findings are found in a DMF manuscript: "Spatial distribution of ages 0 and 1 Atlantic cod (*Gadus morhua*) off eastern Massachusetts coast, 1978-1999, relative to 'Habitat Area of Particular Concern.'"

Based on these data and DMF's assessment of age 0 and 1 distribution, the New England Council concluded that the entire perimeter of the Gulf of Maine from mean low water to a depth of 30 feet below mean low water should be designated as "Habitat Areas of Particular Concern." Here is where the emphasis on habitat for increasing survival of ages 0 and 1 cod has been placed. For this reason the importance of the Sanctuary for age 0 and 1 improved survival through more habitat protection (i.e., bottom trawling prohibitions) is quite questionable. Providing more habitat in the Sanctuary may not have the desired effects. Habitat already is widespread throughout the Gulf of Maine where the nursery function is prevalent. See the attached figures depicting relative abundance (number per tow) of ages 0 and 1 cod from DMF spring and autumn inshore trawl surveys from 1978 through 1999.

If the Sanctuary Plan is to include areas requested of the Fishery Management Council for closures to trawling and scallop dredging to improve survival of ages 0 and 1 cod, the Plan must first make a compelling case as to how areas that historically have had low abundance of young stages of cod can be transformed to mimic very productive inshore areas. This is a major issue heretofore not considered.

This is an emerging Sanctuary resource management issue of great significance, and it is central to the issue of fishery or ecological reserves being considered for a portion of the Sanctuary. It's likely this suggestion was made as part of an ongoing initiative by environmental organizations to spotlight the Sanctuary as the archetype MPA to be part of their sought-after network of marine reserves in the Gulf of Maine. DMF supports establishing marine reserves only when there are very specific, unambiguous, attainable objectives and when there will be effective, timely monitoring to determine success of reaching reserve's objectives. Those objectives must be consistent with fisheries managers' plans to improve stock status and enhance habitat protection. Consequently, any consideration of a reserve(s) in the Sanctuary must be very carefully considered and well justified. Stakeholder involvement in MPA (i.e., reserve) identification and support for implementation are critical elements of a successful MPA.

Furthermore, any consideration should avoid use of a Sanctuary reserve as an element of precautionary fisheries management. While some reserve proponents will find this intent very attractive, fisheries managers will not. Building productive and cooperative relationships with New England Council and state fisheries managers is an important issue and should be a Sanctuary high priority.

Another emerging Sanctuary resource management issue is protection of biodiversity. Protecting marine biodiversity is a relatively recent objective, and it can be ambiguous. Because the Sanctuary places a high premium on this concept, the Sanctuary should better define the term especially as to how and to what extent habitat loss in the Sanctuary affects biodiversity. If biodiversity is reduced, what are the consequences? How is the efficacy of the Sanctuary affected? The impetus for protecting biodiversity is the accelerating rate of species disappearance (extinction) due to habitat loss, pollution, and introduction of exotic species. An issue is why this impetus pertains to activities within Sanctuary boundaries.

Requiring biodiversity protection is very defensible and required for many areas on land and for marine areas with coral reefs, sea grass meadows, mangrove swamps and other fragile, unique ecosystems easily destroyed by human activities. But the Sanctuary is a dynamic oceanographic area with an ecosystem typical of temperate climates having a complex pattern of seasonal changes in productivity. The public and especially the fishing industry requires a good explanation about why the Sanctuary's biodiversity is special enough to warrant possible future closed areas to protect that biodiversity.

Another scoping issue is adequacy of Sanctuary boundaries and zones to protect Sanctuary resources. We see no reason to expand the boundaries or to change them in any way. The Sanctuary already poses a challenge for its administration, including research, monitoring, and enforcement. We suggest a continued focus on the Stellwagen Bank area and an avoidance of the likely conflict with the fishing industry that will occur if the Sanctuary's scope is widened to include areas such as Jeffrey's Ledge. First identify what needs to be done in the existing Sanctuary. Make a compelling case for those changes. Evaluate the consequences of those changes. If benefits prove to be significant, then consider a Sanctuary expansion based on results and not supposition.

Zoning is a concept applied by DMF in territorial waters of the Commonwealth. It involves a great deal of careful planning and justification and a major investment in at sea enforcement and monitoring. Some of our zoning efforts appear to have been successful but only with special efforts by enforcement to make it work. If the Sanctuary attempts to zone the Bank and nearby environs for whatever purpose, it must learn from our experience and temper its enthusiasm for the approach with a large dose of harsh reality. High priority issues such as protection of special locations (e.g., wreck of the Portland) should be the focus of zoning requiring enforcement and monitoring with already limited Sanctuary funds.

At the Provincetown public hearing you expressed your concern about sand eels in the Sanctuary. I believe you said that sand eel abundance was down, and that was a concern. Sand eels are important prey for marine mammals. Although we cannot comment on whether abundance is up or down, we can respond to your suggestion that trawling or scallop dredging in the Sanctuary might be having an impact on sand eel abundance due to impact on sand habitat. That was your implication, although perhaps I misunderstood your point.

We bring your attention to a recent paper published in Marine Ecology Progress Series entitled "Sand eel recruitment in the North Sea: demographic, climatic, and trophic levels" (August 2002, Vol. 238). These U.K. researchers concluded that climate change may impact upon sand eel populations in the North Sea. They speculated that the southern limit of the species' distribution could shift northward if conditions become warmer, and recruitment might become compromised by rising temperatures. They highlighted that the North Atlantic Oscillation has been in an extreme positive phase during the last half century, and the resultant climate forcing can have major effects on fish populations (perhaps on sand eels). Over the last few years, at least, we've witnessed warmer temperatures in Massachusetts Bay and a northward shift of more southern species (e.g., black sea bass) indicating some important change in sea temperatures.

Furthermore, abundance of other species may be having an important effect on sand eel abundance. As noted in Fishes of the Gulf of Maine (Bigelow and Schroeder 2002), "Western North Atlantic populations of sand lance increased dramatically in the

early 1980s. This population explosion was correlated with a decline in herring and mackerel. Sand lance seemed to have replaced these stocks..." Currently we have extremely large abundance of both herring and mackerel off our coast. If there is a relationship, sand eels may be suffering the consequences of this ecosystem shift in species dominance.

Furthermore, whiting are aggressive predators of sand eels that "do not hesitate to follow them up onto the sand, often stranding them in such numbers as to cover the flats" (Bigelow and Schroeder). Consider that the last assessment of whiting abundance revealed that "temperature patterns and trends in silver hake distribution support the view that there has been a shift in range from south to north, forced by environmental conditions." Biomass is high and is "likely near carrying capacity." This is quite a statement, and it has serious implications for sand eel abundance and Sanctuary denizens that depend on eels (marine mammals). A whiting fishery in or near the Sanctuary makes a great deal of sense especially when prosecuted with the sweepless trawl - the gear you witnessed in action on the Blue Skies.

Sand eels dart into and burrow in sand for temporary shelter. They escape into the water column when disturbed. There can be no adverse effects on sand eel abundance from trawling or scalloping in sandy areas or wherever else they reside. Abundance is affected by the environment and interactions with other species (predators and competitors).

In conclusion, DMF looks forward to working with you and your staff on action plans for the Sanctuary. Opposing points of view expressed at the public hearings will have to be debated and reconciled if possible. The next few months leading up to the Draft Management Plan for the summer 2003 should witness the clash of agendas of people and organizations wanting to seize this Sanctuary initiative as the vehicle to maximize habitat protection in the interest of precautionary habitat management, and even precautionary fisheries management.

We hope it doesn't come down to a win-lose situation for those people and organizations, DMF included, with Sanctuary staff being whipsawed by those competing for Sanctuary favor. There must be win-win situations. The Draft Management Plan must be rife with research agendas and strategies to answer important Sanctuary questions and with actions plans related to protection of well-defined, sensitive habitat. There also must be a blueprint for continued cooperation with and support from the fishing industry and state and Council fisheries managers who share many of the same concerns as the Sanctuary.

Sincerely yours,








David E. Pierce, Ph.D.  
Deputy Director

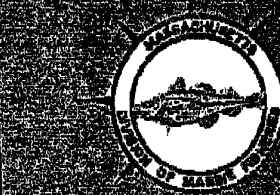
Paul Diodati  
Massachusetts Marine Fisheries Commission

Figure 9. Relative Abundance (number per tow)  
of Age 0 Atlantic cod from MDMF Spring  
Inshore Trawl Surveys, 1978 - 1999.

Total Number Stations = 933  
Stations with Age 0 cod = 358

NUMBER/TOW

-  251 - 2500
-  101 - 250
-  26 - 100
-  1 - 25
-  Zero Catch



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JANUARY 2000  
FISH AND WILDLIFE SERIES



Figure 10. Relative Abundance (number per tow)  
of Age 1 Atlantic cod from MDMF Spring  
Inshore Trawl Surveys, 1978 - 1999.

Total Number Stations = 933  
Stations with Age 1 cod = 385

NUMBER/TOW

○ 101 - 420

○ 26 - 100

○ 1 - 25

+ Zero Catch

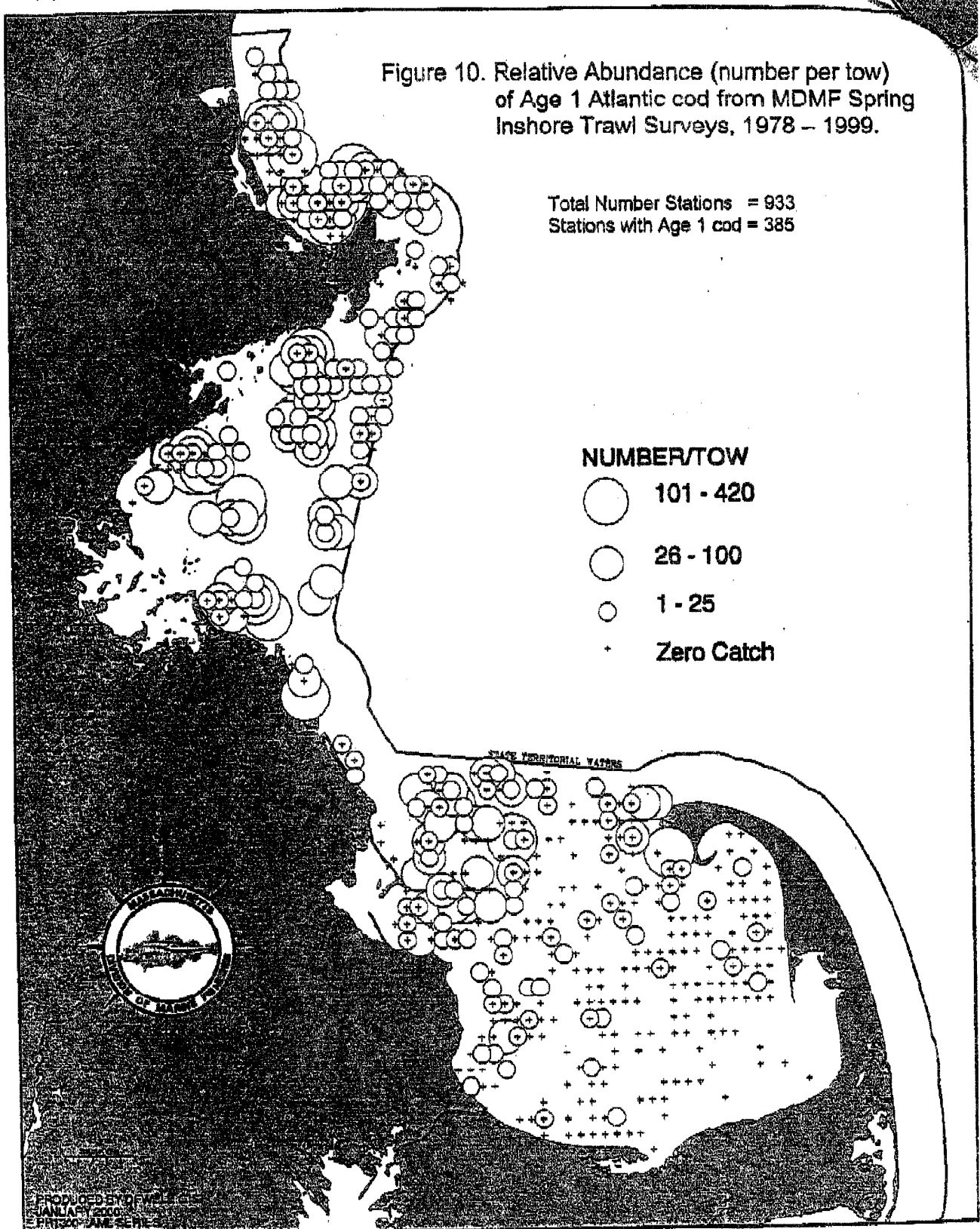


Figure 11. Relative Abundance (number per tow)  
of Age 0 Atlantic cod from MDMF Autumn  
Inshore Trawl Surveys, 1978 - 1998.

Total Number Stations = 850  
Stations with Age 0 cod = 456

NUMBER/TOW

○ 251 - 2924

○ 101 - 250

○ 26 - 100

○ 1 - 25

+ Zero Catch



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JANUARY 2000/1999  
5013000/AMC/SEB

Figure 12. Relative Abundance (number per tow)  
of Age 1 Atlantic cod from MDMF Autumn  
Inshore Trawl Surveys, 1978 - 1998.

Total Number Stations = 850  
Stations with Age 1 cod = 121

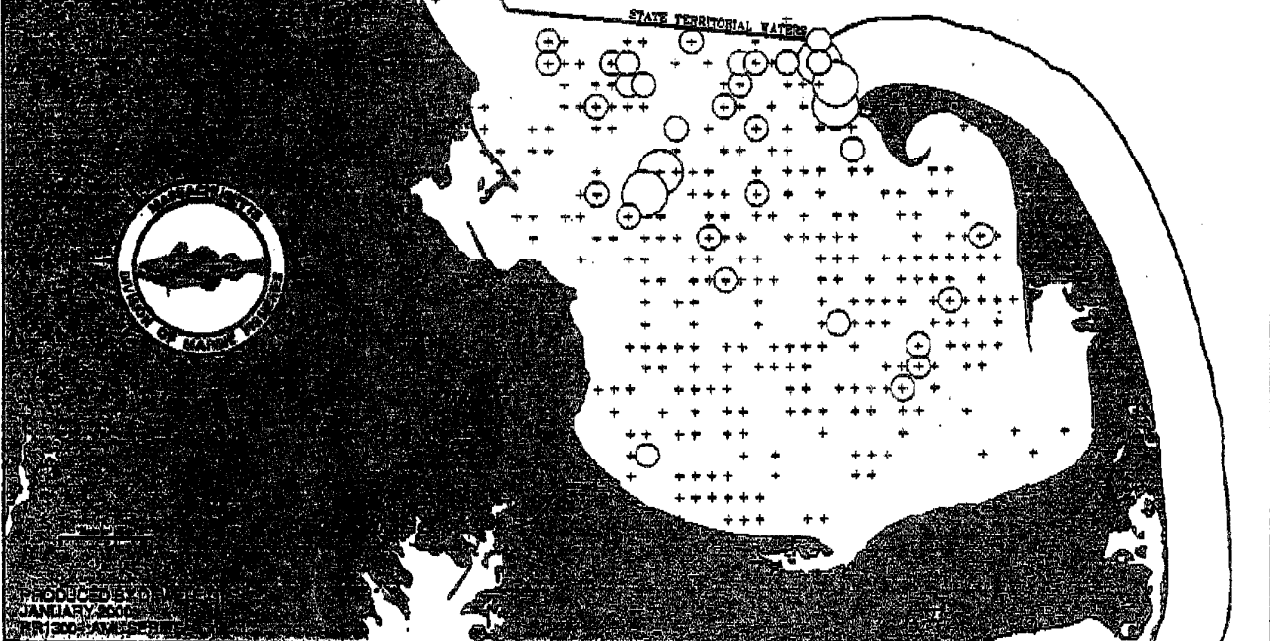
NUMBER/TOW

○ 101 - 372

○ 26 - 100

○ 1 - 25

• Zero Catch





**ENVIRONMENTAL DEFENSE**

finding the ways that work



October 17, 2002

Mr. Craig MacDonald  
Sanctuary Superintendent  
Stellwagen Bank National Marine Sanctuary

NGO

Also via fax: (508) 545-8036  
Also via email to: [sbnmsplan@noaa.gov](mailto:sbnmsplan@noaa.gov)

**RE: Comments on Scoping of Issues for the management plan review of the  
Stellwagen Bank National Marine Sanctuary.**

Dear Mr. MacDonald:

We are hereby submitting these comments on your agency's scoping of issues for the management plan review of the Stellwagen Bank National Marine Sanctuary on behalf of the 300,000 members of Environmental Defense.

Environmental Defense has consistently been a strong supporter of the National Marine Sanctuary Program. We have worked extensively, in conjunction with other national organizations, to help ensure adequate annual federal funding levels for the Sanctuary Program. Environmental Defense is, however, increasingly concerned that the living marine resources within the Stellwagen Bank National Marine Sanctuary exhibit compelling and well-documented evidence of biological declines, in spite of their Sanctuary status. Since the thirteen National Marine Sanctuaries are considered to be the crown jewels of America's marine environment the public trust responsibility of the Sanctuary Program, as stated in the National Marine Sanctuaries Act, requires that the biological diversity and ecological integrity of sanctuary ecosystems be conserved and sustained. The present management plan review offers a timely opportunity to ensure that these goals are achieved in the Stellwagen Bank National Marine Sanctuary.

We encourage the Sanctuary Program, the Sanctuary Advisory Council, and the Sanctuary staff to take full advantage of the current management plan review process to implement substantial improvements in current management strategies. Now is the time to address the problems we are experiencing within Sanctuary waters with respect to each of the following areas of concern:

## **1. Vision for a National Marine Sanctuary**

The mission of a National Marine Sanctuary, according to the National Marine Sanctuaries Act, is “to preserve, protect and enhance the biodiversity, ecological integrity, and cultural legacy” of the Sanctuary. This is a noble and worthwhile mission for the 13 existing Sanctuaries, which are considered the jewels of the ocean environment. However, this mission cannot be successful in the Stellwagen Bank National Marine Sanctuary without a comprehensive vision of what it would mean for the unique ecosystem that is found here. This management plan review presents an opportunity for Sanctuary managers, along with the many stakeholder groups that depend on and value the Sanctuary, to create a vision of the Stellwagen Bank that is true to its legal mandate. The Sanctuaries are charged by the American public with stewardship of marine resources of national significance and many members of the public expect the title Sanctuary to provide a greater level of protection. To ignore the need to implement additional levels of resource protection, where evidence indicates such measures are needed, risks undermining public and legislative support for the Sanctuary Program.

## **2. Inventory of Resources at Risk:**

The Sanctuary was originally established to address what were then considered to be the primary threats facing the ecosystem: floating casinos, an old hazardous waste dumping site, offshore oil and gas drilling and sand and gravel mining. Since then, the health of some biological systems has deteriorated within these waters from different threats. Populations of many species of groundfish, for example, have experienced severe declines. Habitats critical to these declining species are found extensively within the boundaries of the Stellwagen Bank National Marine Sanctuary. While the New England Fishery Management Council (NEFMC) is working to try to respond to these problems through Amendment 13 and other measures, Sanctuary managers cannot ignore the biological declines within their own Sanctuary waters. The special mandate of the Sanctuaries to protect biological diversity while allowing compatible uses differs from the emphasis put on maximizing fishery yields by the NEFMC.

The continuation of industrial-scale fishing in most Sanctuary waters with no restrictions aimed at protecting wildlife and habitat seems incompatible with the mandate of the Sanctuaries. In addition, there are indications that fishing gear damage to critical bottom habitats of the Stellwagen Bank National Marine Sanctuary may necessitate additional management measures in some areas of that Sanctuary. We therefore encourage the National Marine Sanctuary Program to take an objective, science-based look at the status and trends of sanctuary resources to enhance protection of biological resources, with the goal of recommending appropriate actions as part of the management plan review.

## **3. Alteration of Seafloor Habitat and Plan for Restoration of Declining Biological Systems and Damaged Habitat:**

There is growing evidence that fishing effort with certain gear types, particularly bottom trawls and dredges is having significant and measurable impacts on benthic communities

in the Sanctuary. Where biological declines are found, and where biological declines are linked to habitat conditions or attributable to human extractive activities, remedial measures need to be evaluated in the Sanctuary management plan review process. Marine zoning, which restricts or prohibits activities in certain areas known to particularly sensitive to such impacts, is an important way to address these issues. Such a zoning scheme should include fully protected marine reserves where appropriate.

#### **4. Threats to Marine Mammals**

The dependence of marine mammals, particularly humpbacks and Northern right whales, on the ecosystem within the Stellwagen Bank National Marine Sanctuary was a critical factor in its selection as a Sanctuary. All due efforts must be made to make the Sanctuary a true haven for these endangered animals. In recent years the number and speed of vessels traversing the Sanctuary have increased significantly, leading to an increase in the threat to marine mammals. Ship strikes are one of the leading causes of injury and deaths to marine mammals, particularly Northern right whales and the Sanctuary should take a lead in reducing harm to these animals. Speed limits should be devised for all watercraft traversing the Sanctuary, including fishing vessels, large commercial ships, ferries, personal watercraft and whale watching boats.

Entanglements are also a major threat to marine mammals in and around the Sanctuary. The high concentration of lobster gear and gillnets within the Sanctuary are potentially hazardous to whales and entanglements and near missed have been witnessed within Sanctuary boundaries. NOAA's Take Reduction Team has developed new guidelines to reduce these risks and we urge the Sanctuary managers to work closely with those involved in this effort. The development of additional restrictions on potentially harmful gear are well within the purview of this management plan revision and should be considered as part of a marine zoning scheme in area and at times when whales are present.

#### **5. Waste Disposal and Water Quality**

While baseline water quality in the sanctuary is generally considered to be good in most areas, there is potential for impacts from waste treatment plants, outfall pipes, and personal and commercial watercraft. Boats and ships, including whale watch boats and personal watercraft present a threat to water quality within the Sanctuary. Although US Coast Guard (USCG) regulations regarding the discharge of sewage are in effect within the Sanctuary, these are not adequate to protect these waters. The sanctuary management plan update should now make certain that sensitive Sanctuary ecosystems are protected beyond the minimum USCG requirements, from any such discharge within Sanctuary waters.

The City of Gloucester has proposed discharging sewage waste offshore, near Sanctuary waters. This would present a grave threat to the health and water quality of the Sanctuary. The sanctuary management plan update should make certain that sensitive Sanctuary

ecosystems are fully protected, in the regulatory sense, from any future ill-advised discharge schemes. Given the preponderance of ocean waters in the Northeast that have been damaged or destroyed by human intervention and the public's clear concern about water quality, the precautionary principle should be applied by Sanctuary managers in protecting these critical offshore areas from further degradation.

The public is still greatly concerned with the nearby Massachusetts Water Resources Authority outfall pipe and is not convinced that its impacts are negligible. It is encouraging that the Sanctuary staff has contracting with Batelle Labs to expand the monitoring efforts associated with the outfall. Monitoring and improvement of water quality in all parts of the sanctuary should be a high priority for the management plan review process.

## **6. Invasive Species**

Ballast water discharges and bilge pumping have been implicated in altering the species mix of many coastal areas by introducing the larvae of invasive species. The shipping traffic that comes through the Sanctuary en route to or from Boston Harbor presents such a threat to Stellwagen Bank National Marine Sanctuary. Preventive measures to preclude the introduction of invasive species, such as restricting ballast water discharge within Sanctuary waters, requiring offshore ballast water exchange and encouraging the development of ballast water treatment facilities in major ports, are well within the purview of the management plan review and should be pursued as part of this process.

## **7. Marine Reserves/Zoning:**

The value of additional protections afforded to certain areas of the marine environment has been demonstrated throughout the world, including within the waters of the Gulf of Maine. For example, when the majority of New England's commercial fish stocks collapsed in the 1990's, the New England Fishery Management Council initiated the use of large closed areas as a management tool. These closed areas are credited with the improvement that has been seen in many fish stocks. Additionally, the reauthorized Magnuson-Stevens Fisheries Conservation and Management Act recognized the importance of habitat protection in supporting sustainable fisheries. The habitat recovery seen within the Northeast corner of the Sanctuary, the area commonly known as the "Sliver", demonstrates that increased protection can help restore habitat within the Sanctuary itself.

Fully protected marine reserves, where all fishing and other extractive activities are banned, offer great promise for the restoration of certain marine species now depleted within the Sanctuary and for the protection of biological diversity and ecosystem health. The implementation of fully protected marine reserves should be retained as one of the tools available to Sanctuary managers to respond to declining fish stocks and loss of invertebrate populations. Because the Stellwagen Bank National Marine Sanctuary contains important habitat types for some of the marine species most at risk, full protection for some areas must be considered as part of the management plan review

process. If the no-action alternative is contemplated by any Sanctuary manager with respect to implementation of marine reserves, the full range of consequences of not acting must be considered, including the fact that the no-action alternative will inevitably lead to more assessments, more overfished species, more closures, smaller trip limits, and increased fishing restrictions.

#### **8. Commercial Submerged Cables:**

Recent advances in telecommunications technology have created a demand for cable corridors, which transit sensitive areas of the Stellwagen Bank National Marine Sanctuary, and one such cable has already been laid. While digital communications via undersea cables can potentially be viewed as an environmental boon, reducing fossil fuel consumption and thus possibly reducing transportation of hazardous petroleum cargoes through sanctuary waters, specific cable routes must be evaluated on a case-by-case basis to ensure that important biological resources are not adversely impacted by such construction.

The company responsible for the cable that currently traverses the Sanctuary, 360 Networks committed to paying \$300,000 a year towards research on the impacts of such a cable as a condition of the permit. However, 360 Networks has failed to pay the second year's funds because it has filed for bankruptcy under Chapter 11. We strongly urge the Department of Commerce to use all legal means available to pursue these funds, which are critical to determining and monitoring of the impacts of cables.

Installation of cable landfalls using laybarge technologies may also create the potential for oil spills and introduced turbidity in particularly sensitive intertidal areas, and mitigation measures should be required to address this threat. The process of permitting new commercial submerged cables through the waters of the sanctuary should put the burden of proof to demonstrate "no harm" on the project sponsors. Cable corridors should not be treated as a franchise which it is the automatic right of Sanctuary managers to sell, but rather presented as a challenge submitted to the project sponsor to demonstrate both the need for, and the innocuous impact of, each specific routing and installation technique.

#### **9. Sanctuary Boundary Adjustments:**

Discussions have been forthcoming for some time about a potential adjustment of the current boundary line to include greater parts of Jeffrey's Ledge in the Sanctuary. Current boundaries include only a small part of this feature, which is considered to be part of a contiguous ecosystem, particular as used by marine mammals for feeding. Consideration of a sanctuary boundary adjustment should evaluate the possibility that enhanced protection of particular biogeographic provinces, and related habitat types, could best be accomplished within a single Sanctuary boundary.

#### **10. Special Areas of Concern Within Current Sanctuary Boundaries:**



Within the current boundaries of the Stellwagen Bank National Marine Sanctuary lie particularly sensitive biological “hot spots”, including feeding areas for endangered humpback and Northern right whales. Biological areas of concern also include key Essential Fish Habitat (EFH) areas. These “centerpiece” biological areas of concern should be carefully identified, evaluated, and then subjected to a higher level of protection from damaging activities by the Sanctuary managers.

## **11. Scientific Research**

The Stellwagen Bank National Marine Sanctuary each has an admirable research program, primarily in partnership with existing research institutions in the region. This research should be continued and expanded, to increase understanding of the unique ecosystem of the Bank. Such research can also provide insights for the management of marine resources outside the Sanctuary. In 1997 the National Marine Fisheries Service and the New England Fishery Management Council (NEFMC) established the WGOM Closed Area, which overlaps 22% of the northeastern part of the Sanctuary. The four major bottom types found within the overlap area, sometimes known as the Sliver, are representative of the four types found in the Gulf of Maine: boulders, cobble, sand, and mud.

Sanctuary staff were quick to recognize and take advantage of the unprecedented research opportunity presented by the Western Gulf of Maine Closure and several important and valuable studies are underway in that area. Many scientists have already advantage of the reduction in bottom disturbance to conduct comparative studies between the closed area and more disturbed sites nearby. Results suggest that reducing the impact on these areas has helped to restore bottom habitat. The Habitat Technical Team of the NEFMC has recommended that the WGOM Closed Area be designated as a Habitat Closed Area as an option under Amendment 13 to the Multispecies Fishery Management Plan for the purpose of protecting essential fish habitat (EFH). In a letter to the Habitat Technical Team, Sanctuary managers strongly urged “the Council and its groundfish committee to incorporate habitat closed area 1 into the draft Amendment 13.” The letter cited the “multiple objectives” this closed area would meet including “recovering groundfish stocks, protecting sanctuary resources, protecting EFH, and establishing a research/reference area.” We agree with this assessment and urge the Sanctuary to work with the Council to create a habitat closed area that could also function as a research reserve within Stellwagen. Currently this area is closed to groundfishing but the bottom is still fished by shrimp trawlers and fishing with gill nets, lobster pots and long lines also occurs within the Sliver. We urge the Sanctuary to increase the protection for this area so that it may serve as a research and reference area to aid in the study and management of both the Sanctuary and the fisheries of the region.

## **12. Socio-economic Research**

The Sanctuary is valued by many groups, including commercial users who are economically dependent on their activities within Sanctuary waters. To ensure a fair review process and the adoption and implementation of improved management measures,

the economic impacts of such measures should be fully investigated and analyzed. The both the immediate as well as the long-term costs and benefits of new measures should be fully analyzed. Such analysis can often reveal that over the long-term, greater ocean protection accrues significant benefits to both the environment and commercial users such as fishermen. To enable such comprehensive socio-economic analysis, the Sanctuary should invest in baseline data collection to determine the full use and non-use values of the Sanctuary. This should include the economic benefits of current extractive uses (e.g., commercial and recreational fishing), the benefits of non-extractive uses (e.g. whale watching and tourism) and the non-use existence value to the public locally and nationwide. Such analysis has been valuable in the current marine reserves process underway in the Channel Islands National Marine Sanctuary.

### **13. Educational Opportunities and Public Outreach:**

The important social and ecological values of the Stellwagen Bank National Marine Sanctuary remain largely unknown to major segments of the public. In a recent poll conducted in New England by Environmental Defense and other conservation groups, only 9% of New Englanders had heard of Stellwagen Bank. The establishment of new interpretive facilities in local communities, even if such outreach is limited by budgetary considerations to a simple electronic kiosk or appropriate signage, would go a long way toward fostering greater public understanding and appreciation for the role of the Sanctuaries in protecting our national treasures in the ocean. The existing displays, included the electronic exhibit at Provincetown, should be better advertised to attract more visitors. The Sanctuary should update and expand the signs posted by the New England Aquarium and explore the possibility of collaborating with the Aquarium and other education institutions to reach a wider public.

### **14. Monitoring and Enforcement:**

Overlapping agencies with multiple jurisdictions and differing priorities each have some role in co-management and monitoring of the waters of the Stellwagen Bank National Marine Sanctuary. Cooperative interjurisdictional efforts to facilitate better coordination among these agencies, in order to ensure that the management mandate of the Sanctuary is not compromised, should be a priority. Management plan review should encourage and prioritize new avenues of monitoring while maintaining the present high degree of focus on monitoring and stewardship of sanctuary resources.

Thank you for this opportunity to provide comments on the Scoping of Issues for the management plan review of the Stellwagen Bank National Marine Sanctuary. It is our view that a comprehensive approach to review of the Sanctuary management should be undertaken at this time, because of the infrequency of such reviews, the observed declines in important Sanctuary species, and the dynamic nature of human impacts on Sanctuary resources. Please feel free to contact us if you have further questions on our comments.

Sincerely,



for

Danielle Luttenberg  
Marine Advocate  
Dlутtenberg@environmentaldefense.org

Environmental Defense  
18 Tremont Street, Suite 850  
Boston, MA 02108  
(617) 723-5111

Cc:

Mr. Dan Basta, Director, National Marine Sanctuary Program  
Mr Ed Lindeloff, National Marine Sanctuary Program

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## ENVIRONMENTAL DEFENSE

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## FAX COVER SHEET

TO: KATE VAN DINEFAX # 781-545-8036

PHONE # \_\_\_\_\_

FROM: ELAINE HORNFAX # 617-723-2999PHONE # 617-723-5111DATE: 10/17 TIME: 3:00NUMBER OF PAGES, INCLUDING THIS COVER 21

KATE,

Please submit these as public comment for  
the sanctuary review.

Those signatures w/out the paragraph on top  
are the backs of pages - everyone who  
signed this agreed to the text.

Thanks  
Elaine

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## ENVIRONMENTAL DEFENSE

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## Protect Ocean Wildlife and Habitat in Stellwagen Bank National Marine Sanctuary

Dear Superintendent MacDonald:

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Sincerely,

Name (Please Print)

Address with Zip Code

Email

Jon St. John	Po Box 999 <sup>01230</sup> Great Barrington, MA	envirodef@sustainableweb.org
Aldo Natalizio	<sup>Antunovic</sup> 109 Lexington St 02466	aldo@brandeis.edu
Vicente G. Santos	109 Ward Ave. Waltham, MA 02453	vgsantos@brandeis.edu
Adan Ruiz	25 Crescent St Waltham, MA 02453	adan@brandeis.edu
Zhao Ma	Rt 26 Cronin's Landing 35 Crescent St. Waltham, MA 02453	mzh@brandeis.edu
Jim Wang	Brandeis's SID program P.O. Box 8110, MS 028 Waltham, MA 02454	JimWang@brandeis.edu

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Name (Please Print)

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David Scardella	28 Hereford Dr. Princeton NJ 08550	—
David S. St. P.	170 Centre Street	—
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Name (Please Print)

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DAN JOURNET	31 MAPLECREST GREENVILLE RI 02825	

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**Name (Please Print)      Address with Zip Code      Email**

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Seth Mendelson	273A W. Main St #11 Malden, MA 02148	

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Name (Please Print)

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Doug Howard	38 PARKER RD Woburn 01880	
Karen Ricciuti	15 Champlain Dr Hudson, MA 01749	vcn Karen R @ aol.com
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Name (Please Print)

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Sincerely,

Name (Please Print)	Address with Zip Code	Email
Steven Hassan	PO BOX 686 Newton MA 02456	steven.hassan@verizon.net

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**Name (Please Print)**

**Address with Zip Code**

**Email**

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Matthew Nuygro		TBhunta44@aol.com
Giovanni P. Anton		Giosafari@aol.com
Tony LaCasse		tlacasse@nag.org

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**Name (Please Print)****Address with Zip Code****Email**

Barrett M Johnson	21A Court St. Groton, MA 01450	Bastet1115@ msn.com
Bob Feldmann	" " "	bfeldmann@ enst.com



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Alice MacLauria	8A Lexington Terrace Waltham, MA 02452	alice.m@brandeis.edu
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**Blue Ocean Society for Marine Conservation**  
118 Pleasant Street Portsmouth, NH 03801

Phone: (603) 431-0260 E-mail: [info@blueoceansociety.org](mailto:info@blueoceansociety.org) Web: [www.blueoceansociety.org](http://www.blueoceansociety.org)

October 16, 2002

**SBNMS**  
MPR Coordinator  
175 Edward Foster Road  
Scituate, MA 02066

Dear MPR Coordinator:

I am writing to comment on the management of Stellwagen Bank National Marine Sanctuary. I am familiar with this area through whale watching and data collection for the past 8 years in the Jeffrey's Ledge/Stellwagen Bank areas. There are several issues that should be addressed as the sanctuary reviews its management plan in the upcoming months.

#### **Human Impacts on Marine Mammals**

The existing whale watch guidelines should be enforced to limit adverse human impact on these animals, many of which are endangered species. Many commercial whale watch vessels do follow these guidelines, but there are several vessels that regularly do not. Vessels often travel through whale feeding areas at unnecessary high speed, and do not follow guidelines governing approach to whales or maximum time to be spent with whales.

In addition, private boaters and recreational and commercial fishers often are unaware of the guidelines and their importance. I urge you to conduct outreach about human impacts on marine mammals, not only toward whale watch vessels, but recreational fishers, commercial fishing boats and private pleasure boaters. Outreach could perhaps start with an informational program or flyer as part of existing boater safety/certification programs or through a mailing to New Englanders with registered boats. Ideally, it would also eventually include a certification requirement for whale watch vessel captains.

Vessel speed in the sanctuary is a great concern, as there has been a dramatic increase in vessel speed over the past several years, and a corresponding increase in collisions between vessels and marine mammals. Speed should be limited in sanctuary waters to at least below 20 knots for all vessels.

#### **Boundary Expansion**

Having spent most of my whale watching time on Jeffrey's Ledge, I'm familiar with the fluctuations of marine life in that area. Through data collection and speaking to other organizations, it is obvious that animals are using both

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*Promoting marine conservation through education & research in New England*

habitats, sometimes moving between the two habitats within a few days. Therefore, it is important to protect this area because of its use as habitat for endangered marine mammals.

Jeffrey's is also an important site for herring to spawn. Herring are an important commercial fish species, and also an important prey source for whales and other marine life. Due to its importance as a herring habitat, whale feeding area and whale watching and research area, Jeffrey's Ledge should be granted sanctuary status.

#### **Impacts of Fishing**

The SBNMS should study and work to mitigate the effects of fishing on the sanctuary, including effects on bottom habitat, ghost gear, and large midwater trawlers. The sanctuary should be protected from gear that damages the bottom habitat. Ghost gear should be monitored, and perhaps a volunteer group could be engaged to help clean up ghost gear, as was done a few years ago in Massachusetts Bay. There are also large midwater trawlers who seem to be competing with whales for food – often over the past several years, we have seen these large vessels trawling in an area populated with whales, only to have the whales “disappear” after the vessels have trawled there. The effects of these large boats should be studied and managed.

#### **SBNMS Outreach Efforts**

Outreach efforts for SBNMS need to be expanded and fully funded. Currently, visitors to the SBNMS web site can't even get current information – many pages haven't been updated in the last year, and there are links to pages that have no information on them. Maybe if a volunteer “Friends of the Sanctuary” group was established, these volunteers could be recruited to write articles and gather information for the web site.

The SBNMS mailing list needs to be updated – during the management process alone, money was wasted in multiple mailings to the same people (I received at least 4 copies of each mailing at various addresses). A database cleanup could possibly save staff time and much paper in the long run.

One of the problems we see every day on the water is pollution – we always encounter marine debris. More education needs to be done with the public on non-point source pollution and marine debris. Perhaps this could start with marine debris information on the SBNMS web site and a boater/marina education program.

**A Sanctuary Should Look Like a Sanctuary**

I realize the SBNMS has limited time and resources in which to accomplish its goals. But the bottom line is, there is a problem that you wouldn't know the difference whether you're in the sanctuary or not. There should be *some* limitations – some difference you would encounter when crossing into the sanctuary – either a reduced vessel speed, reduced vessel traffic, enforcement of guidelines involving marine mammals, etc. I strongly support more visible and effective protection measures for this very important habitat.

Thanks for your consideration of my concerns. If you have any questions, please feel free to contact me at 603-431-0260 or at [jen@blueoceansociety.org](mailto:jen@blueoceansociety.org).

Sincerely,

A handwritten signature in black ink, appearing to read "Jen Hafner". The signature is fluid and cursive, with the first name "Jen" and last name "Hafner" clearly distinguishable.

Jen Hafner  
Director

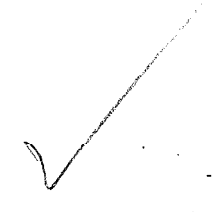


## The Cousteau Society

October 18, 2002

Dr. Craig MacDonald  
Superintendent  
Stellwagen Bank National Marine Sanctuary  
175 Edward Foster Road  
Scituate, MA 02066

NGO



Dear Dr. MacDonald:

As the Management Plan for the Stellwagen Bank National Marine Sanctuary is being reviewed, The Cousteau Society, on behalf of more than 150,000 members, urges the establishment and enforcement of adequate no-take reserves within the sanctuary. With the proliferation of recent findings, from *Science*, *Nature*, the National Research Council et alii, there is no questioning the efficacy of no-take reserves in protecting and restoring both habitats and species. With the ongoing decline of species diversity, lack of recovery of groundfish stocks, threats to highly endangered marine mammals, there is no questioning the need for more rigorous measures to protect and restore both habitats and species.

We sympathize with the complications of managing a sanctuary subject to the jurisdictional authority of multiple agencies and the claims of multiple stakeholders. Precisely to relieve the sanctuary of the very possible damage being done while conflicting interests are sorted out, we strongly encourage you to designate no-take reserves.

Such zones, where no extractive or disturbing activities are allowed, should be based on the best available science and, even more importantly, on the precautionary approach to management, erring on the side of caution in the face of scientific uncertainty. Rather than requiring proof that a proposed activity, either within or outside no-take zones, will cause harm, we urge you to require convincing evidence that a proposed activity will not cause environmental harm.

Adequate enforcement will be necessary to meet the goals of the no-take zones, to include effective monitoring, appropriate sanctions and accessible conflict resolution mechanisms. In order to develop a community of stakeholders who understand the need for no-take reserves and are willing to comply with restrictions in order to achieve long-term gains, public education and outreach should be expanded. Reporting of management results should be included as part of these public programs, and the participation of non-governmental organizations sought to maximize their dissemination.

Yours truly,

Clark Lee S. Merriam  
The Cousteau Society

### The Cousteau Society, Inc.

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UNIVERSITY OF  
PENNSYLVANIA

✓  
John D. Crawford, Ph.D.

David Mahoney Institute of Neurological Sciences

Neuroscience Graduate Group

Project Manager / Management Plan Review  
Stellwagen Bank National Marine Sanctuary  
175 Edward Foster Rd.  
Scituate MA 02066

Thursday, October 17, 2002

FAX: 781-545-8036  
e-mail: [SBNMSPLAN@noaa.gov](mailto:SBNMSPLAN@noaa.gov)  
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Acad

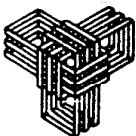
Dear Management Plan Reviewers:

I am writing to provide input to the management plan review for the *Stellwagen Bank National Marine Sanctuary* (SBNMS).

When I first learned about the National Marine Sanctuary Program, and the Stellwagen Bank Sanctuary in Massachusetts Bay, I was encouraged. The evidence is overwhelming that we need to aggressively pursue marine conservation in the Gulf of Maine, before causing further damage to ecosystems and sacrificing those marine resources that have drawn people to our waters for centuries. Fully protected marine reserves have been in use around the world for decades. For example, New Zealand has a highly successful system of marine reserves that have been used to protect ecosystems and restore commercially important species. These are carefully selected regions where everything is protected, the bottom is not dragged and the fish are not removed. At first, I thought we were forward thinking enough to have a reserve like this at Stellwagen.

When I learned more about how SBNMS was being managed, I became discouraged and angry. As a tax payer whose money is being used to run the sanctuary system, I felt cheated because SBNMS is not a sanctuary by any normal definition of what a sanctuary should be. We really do need protected marine sanctuaries in our region, we are being led to believe that we have them, but we do not.

Granted, it was an important step forward when Stellwagen Bank was protected against gravel and oil extraction in 1992. Nevertheless, with collapsed fish stocks, sea floor homogenization by draggers, and whale populations threatened with extinction, this minimal level of protection for Stellwagen is far from adequate in 2002. The goal of the management plan review should be to make SBNMS a real sanctuary where all animals and plants are protected, and where the terrain (i.e. the bottom) can not be altered.



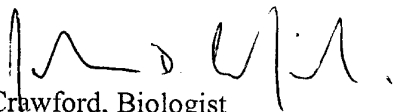
Here are some of the actions I would like the managers of Stellwagen Bank National Marine Sanctuary to implement:

- 1) Protect the sea floor. It is well known that dragging fishing gear across the sea floor alters the structure of the bottom, destroys many species of benthic invertebrate animals including sponges, bryozoans, corals, and amphipods, and disrupts habitat used by small fish. Some of these fishes are prey for great whales (e.g. sand lance), and all of these organisms are essential links in an ecosystem that should be protected by a sanctuary.
- 2) Protect the commercially exploited animals. At present, a codfish is no better protected within the boundaries of SBNMS than it would be on the Grand Banks, or anywhere else in the Gulf of Maine. The Marine Sanctuary Program must take control of fishing within SBNMS. All fishing should be banned within at least a major portion of SBNMS. If any fishing is going to be allowed within this *sanctuary*, it must be done with low impact methods, and monitored closely by sanctuary scientist so that fished populations can increase within the sanctuary, and so that the fishing gear does not impact whales, turtles and other species that the sanctuary should be protecting.
- 3) Reduce boat traffic through the sanctuary. There is a major shipping lane passing through the southern part of the sanctuary. Recreational boats, ferries, and whale watching vessels frequent the sanctuary with no special restrictions on their speed, waste discharge, or the density of boats within the area we are supposed to be protecting. Cargo ships should be diverted around the sanctuary. Strict speed limits should be imposed within the sanctuary to reduce collisions with whales and sea turtles. The density of boats allowed in the sanctuary at any given time should be regulated. Whale watch boats should be restricted to a perimeter area surrounding a protected core where whales can feed without being disturbed. Waste discharge of any kind should be banned within the sanctuary. Commercial boats should not be allowed within the sanctuary after dark.
- 4) Promote marine ecosystems research. There is no question that additional high quality research is needed in order to gain a better understanding of the complex ecological interactions that govern the success of the highly visible species that we eat or enjoy during a whale watching trip. SBNMS should be a major site for marine research on undisturbed ecosystems. This will require full protection of substantial regions of the sanctuary for research purposes.

Major changes are needed in the management of SBNMS. In the previous management Plan Review (1998), many important issues were identified for discussion but little action was taken. Many of the issues could benefit from further research, but this fact can not be used as an excuse for further inaction. If the outcome of the present review is simply to generate a new list of issues for further study, then this review will have been a failure in my view. We need better management now, and continued research so that we can do even better in the future.

Thank you for your efforts to protect this important part of our marine environment.

Sincerely,



Dr. John D. Crawford, Biologist  
Associate Professor  
University of Pennsylvania  
12 Tally Ho Lane  
Wayland, MA 01778

508-358-3347  
jud@sas.upenn.edu

October 18, 2002

Sent by U.S. mail, facsimile transmission and electronic mail

Ms. Kate Van Dine  
Management Plan Review Coordinator  
Stellwagen Bank National Marine Sanctuary  
175 Edward Foster Road  
Scituate, MA 02066

NGO ✓  
  
The Ocean  
Conservancy

**RE: Scoping Comments for the Management Plan Review of Stellwagen Bank  
National Marine Sanctuary**

Dear Ms. Van Dine:

The Ocean Conservancy (formerly the Center for Marine Conservation) appreciates the opportunity to comment on the Stellwagen Bank National Marine Sanctuary (SBNMS) Management Plan Review (MPR). We commend the National Marine Sanctuary Program (NMSP) for reinstating scoping by holding nine scoping meetings in Connecticut, Massachusetts, New Hampshire and Maine this fall. Please accept the following comments on behalf of our more than 120,000 members nationwide including nearly 10,000 members in the New England states.

The Ocean Conservancy supported the creation of the SBNMS and was actively involved in developing, commenting on, and ensuring adoption of, the Sanctuary's original management plan. Our organization has been a strong proponent of periodically reviewing and revising management plans for all National Marine Sanctuaries and was instrumental in securing the legislative mandate requiring such reviews. We believe that, consistent with the National Marine Sanctuaries Act (NMSA), such reviews should be comprehensive and should include revisions to regulations as necessary to ensure that each Sanctuary provides the comprehensive and coordinated protection required under the NMSA. An Ocean Conservancy staff member currently represents conservation interests on the SBNMS Sanctuary Advisory Council, and we look forward to continued participation in the revision of the SBNMS management plan and future Sanctuary operations.

In the years since the original management plan was approved, many things have changed: there is greater understanding of the functioning and composition of healthy marine ecosystems; more demands are being placed on finite marine resources within the Sanctuary and the Gulf of Maine; and an increasing body of research has demonstrated the adverse impacts that human activities have had, and continue to have, on marine ecosystems and the consequent decline of many species and habitats. The management plan review process presents an important opportunity for the Sanctuary to revise its management plan to respond to these changes.

*The Ocean Conservancy strives to  
be the world's foremost advocate  
for the oceans. Through science-  
based advocacy, research,  
and public education, we inform,  
inspire and empower people  
to speak and act for the oceans.*



The revised management plan must address the intensified use of Sanctuary resources, reflect the improved state of knowledge, provide not only for more effective protection of resources but also recovery of depleted and damaged resources, and ensure the Sanctuary does a better job of fulfilling its mandate. Specifically, the revised management plan and any accompanying regulations should:

- (1) Emphasize the primary goal of the NMSA to protect resources by implementing management measures to accomplish this goal, including but not limited to the following.
  - (A) Establish a scientifically based network of no-take marine reserves, adequate to help protect and restore habitat, conserve wildlife, promote marine biodiversity and healthy ecosystem functioning, and provide relatively undisturbed areas for scientific research.
  - (B) Implement other Sanctuary-specific limitations on fishing as needed to protect biological resources as well as cultural resources such as the wreck of the steamship *Portland* and otherwise ensure fulfillment of the Sanctuary's mandate.
  - (C) Implement enforceable regulations regulating vessel speed and conduct to protect whales within Sanctuary boundaries.
  - (D) Increase protection of the Sanctuary's water quality by prohibiting vessel discharge within the Sanctuary, e.g. graywater, ballast water and blackwater, establishing water quality standards and pollution response plans, and increasing water quality monitoring.
  - (E) Consider whether the Sanctuary's boundaries should be expanded to include additional area(s), such as all of Jeffrey's Ledge, and what, if any, protective measures are needed in additional areas to protect Sanctuary resources.
  - (F) Continue current prohibitions on the exploration, development, or production of industrial materials, oil and gas, sand and gravel extraction, and seabed alteration.
  - (G) Establish a clear protocol with full public review for issuance of special permits to ensure Sanctuary resources are not put at risk.
- (2) Increase coordination and collaboration with other agencies in order to achieve the NMSA's primary goal of resource protection.
- (3) Expand scientific research and monitoring, particularly to assess the status of Sanctuary resources, the effects of human activities and other factors on those resources, and the effectiveness of management measures in protecting and restoring Sanctuary resources.
- (4) Increase and strengthen public outreach and education programs.
- (5) Provide sufficient resources for administration and enforcement to implement Sanctuary policies and regulations.

These recommendations are discussed in detail below. Any revisions to the management plan and accompanying regulations should be accomplished through processes (such as action plans) with specific milestones and timetables so resource protection is not delayed by indefinite implementation outside of the management plan review process. Should any of these recommendations be deemed to require modification to the "terms of designation" of the Sanctuary (which may require additional procedural steps as provided by the NMSA), the Sanctuary should immediately initiate all appropriate steps to modify the regulations as needed.

**(1) The Revised Management Plan Must Focus on Protecting and Restoring Resources within the Sanctuary.**

The primary purpose of the NMSA is "to maintain the natural biological communities in the national marine sanctuaries, and to protect, and where appropriate, restore and enhance natural habitats, populations, and ecological processes." 16 U.S.C. §1431(b) (3). Furthermore, public and private uses of Sanctuary resources must be "facilitat[ed] to the extent compatible with the primary objective of resource protection." 16 U.S.C. §1431(b) (6) (emphasis added). The revised management plan for SBNMS should clearly advance these purposes and policies of the NMSA.

The Sanctuary currently provides important protections from activities such as sand and gravel extraction and oil and gas development, as well as a focus for important research and public education. However, the Sanctuary has not been effective in protecting the living resources, habitats, and waters within its boundaries. The Ocean Conservancy recently completed a detailed analysis of existing marine and coastal protected areas in the area. In our report, *Marine and Coastal Protected Areas in the United States Gulf of Maine Region*, we identified over 300 federal and state protected areas, and performed three separate analyses assessing the effectiveness of these areas for long-term conservation of the Gulf's marine biodiversity. We found that most of the Gulf's waters are lacking effective protected areas. SBNMS was judged to be less effective in conserving the Gulf's marine species and habitats than fishery closures implemented to assist the rebuilding of depleted groundfish stocks. Given that the Sanctuary is obligated under the NMSA to provide protection to the full range of Sanctuary resources, this situation is unacceptable and cannot continue.

There are several specific examples that demonstrate the need for stronger protections within the Sanctuary. Many New England groundfish stocks continue to be overfished and recent research indicates that biodiversity of fishes within the Sanctuary is declining. Endangered northern right and humpback whales continue to be at risk from ship strikes, entanglement in fishing gear, and vessel traffic. Habitats and species are at risk from bottom disturbance and pollution. Water quality within the Sanctuary has been adversely affected by land-based pollution, vessel discharges and other pollution sources, threatening both marine wildlife and habitat. The revised management plan must include more effective measures to protect and restore all resources within the Sanctuary, complementing and reinforcing management measures established by other authorities to reflect a comprehensive, precautionary management approach.

These recommendations are discussed in detail below. Any revisions to the management plan and accompanying regulations should be accomplished through processes (such as action plans) with specific milestones and timetables so resource protection is not delayed by indefinite implementation outside of the management plan review process. Should any of these recommendations be deemed to require modification to the "terms of designation" of the Sanctuary (which may require additional procedural steps as provided by the NMSA), the Sanctuary should immediately initiate all appropriate steps to modify the regulations as needed.

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(A) No-Take Marine Reserves

The Ocean Conservancy believes scientifically-based no-take marine reserves, areas where no extractive activity is allowed, are necessary to protect and restore SBNMS resources as mandated by the Sanctuary Act. Since the designation of SBNMS in 1992, no-take marine reserves have increasingly been recognized as an important conservation and management tool. As a state of the art management technique for Sanctuaries that has emerged since the original management plan, implementation of no-take marine reserves should be provided for in this review. The best available science (documented by the National Research Council, the American Association for the Advancement of Science, the National Center for Ecological Analysis and Synthesis and an extensive and growing body of scientific literature from the US and around the world) testifies to the effectiveness of scientifically based no-take reserves to help protect and restore habitats, conserve species (including those of both commercial and ecological significance), promote healthy ecosystem functioning, and provide relatively undisturbed scientific reference sites. Given the urgent need to protect Sanctuary resources, including promoting the recovery of depleted species and damaged habitats, it is even more important that the Sanctuary implement a process through the management plan review to establish scientifically based no-take marine reserves.

No-take marine reserves are singularly well suited to, and necessary for, achieving the Sanctuary's purpose: "to maintain the natural biological communities ... and to protect, and, where appropriate, restore and enhance natural habitats, populations, and ecological processes." The pioneering work using reserves in the Florida Keys National Marine Sanctuary demonstrates the benefits to Sanctuary resources – in only a few years, habitats and some wildlife are already showing clear improvements. SBNMS resources can similarly benefit from no-take marine reserves.

The issues of marine protected areas generally, and no-take marine reserves specifically, raise substantive concerns regarding resource protection as well as management concerns regarding process and authority. As noted in The Ocean Conservancy's 2001 report previously referenced, *Marine and Coastal Protected Areas in the United States Gulf of Maine Region*, a variety of state and federal agencies manage numerous protected areas providing an array of management measures, but there are no no-take marine reserves providing comprehensive protection to the marine ecosystem. The number of agencies and authorities involved is often confusing, as demonstrated by recent discussions of MPAs and marine reserves in the New England region that have been disjointed and polarizing. As impacts upon the Gulf of Maine's environment grow and marine resource management becomes more complicated, it is increasingly urgent that managers consider better use of MPAs including no-take reserves. The Sanctuary can and should lead this effort by establishing an inclusive process to designate scientifically based no-take reserves with clear objectives within Sanctuary boundaries.

To date, there are no no-take reserves in SBNMS. The only sites limiting fishing in the Sanctuary have been established under the Magnuson-Stevens Fisheries Conservation and Management Act (MSFCMA). In 1998, the New England Fishery Management Council (NEFMC) established the Western Gulf of Maine closed area (WGOM), closed to commercial ground fishing; approximately 120 square miles of this area is within SBNMS

boundaries. The purpose of this closure was to assist rebuilding of depleted groundfish stocks, and it was established with a "sunset date" of 2002. This closure has assisted the Sanctuary to partially fulfill its mandates, both by reducing to some extent the impacts of fishing on Sanctuary resources and by facilitating research. Almost immediately after its establishment, Sanctuary researchers began an important study within the WGOM closure to evaluate the recovery of benthic habitat from the impacts of fishing gear used to catch groundfish. This study is unique in the Gulf of Maine, and is providing valuable ecosystem and fishery management information. Indeed, the NEFMC has considered designating the portion of SBNMS within the WGOM closure as a "research reserve," to provide relatively unimpacted areas for fishery management and habitat studies.

However, there are a number of problems with the existing closure, and with relying exclusively on the NEFMC and MSFCMA to decide its future and the role of reserves in SBNMS. First, the utility of the WGOM closure both for conservation of resources and research is reduced by the fact that other fishing activities are still legally permitted within the area. Second, this area was selected to achieve groundfish management goals, not ecosystem protection or research goals. The process to select areas within SBNMS where fishing should be limited or prohibited should consider the full range of habitats, biological communities and ecological processes to implement the NMSA mandate. Third, the closure nearly expired in 2002 and was renewed only at the last minute during complicated groundfish litigation and related management actions. The Sanctuary cannot accomplish its resource protection and research goals amidst such uncertainty about key management measures implemented within its boundaries. Fourth, progress in establishing research reserves via the NEFMC process remains uncertain. This process, begun in 1998, has since stalled. Despite a year of preliminary scoping, Council approval in 2000 to fully develop the proposal, and an even more urgent need for the information and comprehensive resource protection such sites can provide, progress on this initiative has lapsed behind action on other fishery management issues.

This situation illustrates the differences between the MSFCMA and the NMSA, and the results when management actions under one law are not designed to meet the mandate of the other. A primary objective of the MSFCMA is to secure the optimum yield from commercial fisheries. In contrast, the NMSA's mandate is to protect natural biological communities, and restore and enhance them where necessary. It is time for the Sanctuary to fulfill the mandate of the NMSA and complement the efforts of other agencies by leading a process to establish scientifically based no-take marine reserves in SBNMS, sufficient to protect resources and restore ecosystems.

No-take marine reserves established by the Sanctuary will fill a void met by no other entity in the Gulf of Maine by providing comprehensive resource protection and relatively undisturbed sites for research that are not subject to disruption caused by changes in other management regimes. Additionally, by clearly articulating the goals for reserves to provide overall ecosystem protection and scientific research sites (supporting the legislated purpose of the NMSA) and establishing an inclusive process to gather information and stakeholder input necessary to identify sites that meet those purposes, the Sanctuary would provide a procedural model that is currently lacking for utilizing this essential management tool.

The Ocean Conservancy strongly urges the Sanctuary to engage with NEFMC and other agencies as a full and active partner in establishing marine reserves in SBNMS, but not to defer this action to the jurisdiction of other agencies. In evaluating reserve options, a wide range of comprehensive alternatives should be considered with respect to, for example, the extent of reserves and implementation methods (e.g. under MSFCMA and/or NMSA). Regulations under the NMSA may be necessary to establish no-take reserves within SBNMS; if so, Sanctuary managers should work with the NEFMC to ensure the adequacy of such regulations. This process should include clear roles for all agencies involved, including assistance with scientific research, socio-economic data collection, resource protection recommendations, stakeholder involvement, monitoring, and enforcement.

#### (B) Consideration of Other Limitations on Fishing

The revised management plan should address the impacts of fishing activities within SBNMS and revise the management plan and regulations as necessary to protect Sanctuary resources. Fishing can adversely affect marine ecosystems in many ways. The most common effects arise through overfishing, bycatch, and changes to habitats. During the designation process, The Ocean Conservancy and others expressed concern about the effects of fishing on wildlife and habitats within Sanctuary boundaries. The current plan leaves resolution of this issue to better implementation of fisheries management through the MSFCMA, but this approach has not adequately protected Sanctuary resources from the adverse effects of fishing as required to meet the mandate of the NMSA. Sanctuary managers can and should take all appropriate steps to regulate fishing activities, in cooperation with the NEFMC, to ensure that SBNMS resources, both living and non-living, are protected and, where necessary, restored.

Other limitations on fishing activities in addition to the implementation of no-take reserves within SBNMS should be considered in the revised management plan to ensure adequate protection and recovery of Sanctuary resources. For example, limitations on the use of bottom gear may be required to protect sensitive species or habitats, or cultural resources (such as the wreck of the steamship *Portland*). If such limitations are deemed necessary, a wide range of comprehensive alternatives should be considered, including Sanctuary-wide measures (such as gear modifications) and zoning options (such as partial closures and gear restrictions). Research and monitoring should evaluate fishing impacts on Sanctuary resources, and the effectiveness of management measures to reduce such impacts so management can be modified in the future as needed to protect resources.

#### (C) Marine Mammal Protection

The revised management plan should increase marine mammal protection within SBNMS boundaries. Seventeen species of whales are known to frequent the Sanctuary, including endangered northern right and humpback whales. The Sanctuary is nationally known as a premier whale-watching destination, by commercial whale-watching as well as casual whale-watching participants. Since the Sanctuary's designation in 1992, impacts on these animals within the Sanctuary have increased, including disturbance and harassment, as well as injurious or fatal collisions between vessels and whales. Our knowledge of how better to protect the animals from these and other impacts has also increased, and the revised management plan should reflect that knowledge. Other efforts are underway to address

some of these issues region-wide, for example through the Large Whale Take Reduction Team and the ship strike committee, but the Sanctuary should fulfill the mandate of the NMSA and establish additional protection to comprehensively protect marine mammals within Sanctuary boundaries.

The revised management plan should establish enforceable regulations for all vessels, commercial and private, to govern conduct around marine mammals. Regulations are needed to protect whales from the impacts of both private and commercial whale-watching, as well as the conduct of all vessels in Sanctuary waters, by implementing measures such as safe speed zones in high use areas, safe viewing distances, and limited numbers of vessels in close proximity to whales. The current whale-watch guidelines have not reduced the potential threat of injury or mortality by whale-watching vessels, both private and commercial, to large whales, as is evidenced by the two reported lethal collisions that occurred in 1998, as well as past and present reports of harassment and injury (65 FR 270). The unenforceable nature of the existing guidelines and NMFS's failure to adequately educate both the general public and all whale-watch vessels about these guidelines points to the need for strong, enforceable, and risk-adverse regulations accompanied by a strong public and industry education component. A comprehensive education effort should accompany implementation of enforceable regulations to ensure that all vessel traffic within SBNMS is aware of the regulations.

Entanglement with fishing gear and collisions with commercial vessels continue to harm marine mammals. In revising the management plan, the Sanctuary should address these issues and consider measures to further reduce fishing gear within its boundaries, require unique gear marking for fishing gear used in the Sanctuary, and implement speed limits within the Sanctuary.

The Sanctuary should coordinate closely with other efforts and agencies on these issues, but the revised management plan should reflect the Sanctuary's primary objective to protect resources and allow only those uses that are compatible with that objective.

#### (D) Water Quality Protection

The revised management plan should address the health of Sanctuary waters and the impacts of water pollution on SBNMS resources. Since the Sanctuary was designated in 1992, the Boston sewage outfall (managed by the Massachusetts Water Resource Authority or MWRA) came online, discharging millions of gallons of secondary treated sewage daily, 12 miles from the SBNMS boundary. Vessels of all types traveling through the Sanctuary may discharge gray water and treated waste, or exchange ballast water. Such activities should be closely examined in the revised management plan to ensure the Sanctuary is protecting the marine life and related activities within its boundaries that depend on healthy oceans.

The revised management plan should develop and implement a comprehensive monitoring program to assess water quality within SBNMS, sources of contamination and the effects of contaminants and toxins on Sanctuary resources. The Ocean Conservancy urges the Sanctuary to work closely with the MWRA, other agencies and stakeholders to increase and strengthen existing efforts on monitoring. Additionally, existing response plans for pollution

events within Sanctuary boundaries should be assessed and revised as needed, and additional response plans should be developed to respond to other events as necessary to protect Sanctuary resources, including pollution events related to the MWRA outfall. Finally, the revised management plan should implement no-discharge regulations within the Sanctuary.

#### (E) Consideration Of Boundary Expansion

The revised management plan should address the adequacy of the Sanctuary's current boundaries to fulfill the purposes of the NMSA. Scientific understanding of the habitats and natural biological communities in and adjacent to SBNMS has improved significantly since the site's designation. This information should be used to assess the current boundaries of the Sanctuary to determine whether expansion of SBNMS should be considered.

Proposals for expansion should be justified on ecological grounds to ensure that such expansion would materially contribute to fulfilling the NMSA mandate to protect and restore Sanctuary resources. For example, if there are key habitats that are currently outside the Sanctuary's boundaries that are important for the conservation of species occurring within the Sanctuary, and if including such habitats would result in clear benefits to those species, then expansion of the Sanctuary to include some or all of those habitats should be considered.

One area to be considered is Jeffreys Ledge. When SBNMS was designated 10 years ago, the boundary lines included the southern third of this area. Since then, this entire feature has been included in the NEFMC WGOM closed area for groundfish management. Like Stellwagen Bank, the contours of Jeffreys Ledge cause upwelling and create a highly productive marine environment. Unlike Stellwagen, though, the primary prey of many marine predators on Jeffreys Ledge (including whales) is herring while Stellwagen's ecosystem is driven by a bait fish called the sand lance.

A growing body of research indicates that Jeffreys Ledge is an important habitat for much of the marine wildlife that inhabits Stellwagen Bank, and that including the entire Ledge within SBNMS could provide comprehensive habitat and ecosystem protection. Research conducted by the Whale Center of New England indicates that herring and sand lance have fluctuating populations, and often when one stock is depressed, the other is abundant, thus the two ecosystems act as alternate habitat to Stellwagen Bank for whales, dolphins, seals, sea birds, predatory fish, and other marine life that inhabit the Sanctuary. The revised management plan should assess the expansion of SBNMS boundaries to include all of Jeffreys Ledge.

Any consideration of boundary expansion should include analysis of appropriate management measures to be implemented within any newly included area(s). Management could include additional protective measures or simply enclosure within the Sanctuary. The extent of management actions within any new area(s) should be based on the reason for inclusion in the Sanctuary, and the specific conservation objectives to be achieved within.



(F) Continued Prohibitions

The revised management plan should continue current prohibitions on: sand and gravel extraction; exploration, development or production of industrial material, oil, and gas; and seabed disturbance.

(G) Revised Protocol For Issuance Of Special Permits

The revised management plan should revise the protocol for issuing special permits for projects such as laying fiber optic cable beneath the seabed, which occurred in SBNMS in 2001. Access through the Sanctuary for this project was granted to a private company in exchange for funds to support Sanctuary research and monitoring plans over the next ten years. Since then, this company has gone bankrupt and the availability of funds to support important Sanctuary programs is in question. Such access to the Sanctuary should not be allowed until a clear protocol is established for the issuance of such permits so that Sanctuary resources and activities are not put at risk, and the NMSA's mandate that permitted activities should be compatible with the primary goal of resource protection is upheld.

Any special permits should be carefully evaluated to identify potential adverse effects on Sanctuary resources. Such evaluations should use a precautionary approach and assess cumulative impacts over time and incorporate other activities occurring in and adjacent to the SBNMS. Applicants should be required to identify and characterize the types, levels and probabilities of potential impacts, and possible mitigating measures. Appropriate research and monitoring plans should also be developed. Depending on the nature of the project, options for restoring impacted Sanctuary resources after the project's life should also be identified and evaluated, including possible removal of any infrastructure or equipment and actions to restore affected habitats. Mechanisms and timelines for the Sanctuary's receipt of appropriate revenues, or financial or other compensation must be developed, and bonds against potential damages posted by the applicant where appropriate.

The protocol should include adequate opportunities for public review and input. Applications under consideration should be published in the Federal Register and subject to public hearings and comment. Any appeals process should also be subject to adequate public review.

**(2) The Revised Management Plan Should Address Interagency Coordination and Jurisdictional Issues.**

SBNMS should fully implement its duty to protect resources and manage uses compatible with that mandate, and use the MPR process to assess and revise as necessary the means to achieve this. The National Marine Sanctuaries Act explicitly recognizes that multiple regulatory agencies may share authority over Sanctuary resources and establishes as one of the primary purposes of the NMSA: "to provide authority for comprehensive and coordinated conservation and management of [Sanctuaries], and activities affecting them, in a manner which complements existing regulatory authorities." 16 U.S.C. §1431(b)(2).

During the scoping process, commenters suggested that the Sanctuary couldn't regulate commercial fishing activities. However, since the Sanctuary's designation, it has become clear that the effects of fishing on the Sanctuary's resources have not been adequately addressed to date to meet the mandate of the NMSA. Sanctuary managers can and should take all appropriate steps in cooperation with the NEFMC to regulate fishing activities within the Sanctuary, to ensure that SBNMS resources, both living and non-living, are protected and, where necessary, restored. Failure to address fishing activities within the Sanctuary is contrary to the stated purpose and provisions of the NMSA and the Sanctuary's adopted management plan, as noted in NOAA's response during designation to comments on the role of the Sanctuary and the NEFMC in regulating fisheries:

"During the process of its consideration of Stellwagen Bank for Sanctuary designation, NOAA/NOS has identified fisheries as a resource of national significance, and is therefore obligated under Title III of the MPRSA (Marine Protection, Research and Sanctuaries Act of 1972) to ensure adequate mechanisms exist to properly manage and protect the long-term viability of this resource within the Sanctuary . . . .

"NOAA does not agree that the regulatory language in the proposed Sanctuary Designation Document (Article VI, section 2) contradicts the intent of the MFCMA (Magnuson Fishery Management and Conservation Act) or that the MFCMA precludes the regulation of fishing within the sanctuaries under Title III of the MPRSA. The intent of the Designation Document language is that the Sanctuary shall be governed by valid regulations, which are the most protective of Sanctuary resources and qualities. This is wholly consistent with Title III and does not conflict with MFCMA."

Final Environmental Impact Statement/Management Plan, Volume 2, appendix G, p. G13-14 (1993)(emphasis added).

Furthermore, the Sanctuary cannot fully carry out the purpose of the NMSA when reviewing management plans to "revise the management plan *and regulations* as necessary to fulfill the purposes and policies of this title" unless all activities within the Sanctuary are assessed for possible regulation, using the full public process afforded and coordinating with other agencies as required. 16 U.S.C. 1431 Sec. 304(e) (emphasis added).

The Ocean Conservancy supports efforts to improve coordination between agencies with overlapping jurisdictions such as NMFS. The Sanctuary should build on existing relationships with other agencies, managers and stakeholders such as the NEFMC, and actively engage them regarding efforts to best protect SBNMS resources from the effects of fishing. However, The Ocean Conservancy does not believe the Sanctuary can fulfill its statutory and regulatory responsibilities to protect Sanctuary resources by deferring to or relying solely on any other entity's management activities that affect Sanctuary resources.

**(3) The Revised Management Plan Should Expand Research and Monitoring Efforts.**

The Ocean Conservancy believes that all National Marine Sanctuaries should foster scientific inquiry to enhance resource management and public education. SBNMS has a

very important role to play in the New England region's marine science research and monitoring activities. The revised management plan should better reflect this role and develop the means to advance it. The Sanctuary should more effectively coordinate and encourage research in the Sanctuary, and identify specific research and monitoring programs that provide Sanctuary resource-related information to directly evaluate and guide management decisions, and enhance the efforts of other agencies and institutions. Such projects should include but are not limited to:

- Analyzing the impacts of bottom trawling and other fishing activities on Sanctuary habitats;
- Assessing fishery bycatch;
- Documenting the efficacy of "no-take" areas;
- Assessing impacts of the Boston Harbor outfall on fish, whales and other Sanctuary resources; and
- Studying impacts of human activities on marine mammals within the Sanctuary.

**(4) The Revised Management Plan Should Increase and Strengthen Education and Outreach.**

SBNMS is New England's only National Marine Sanctuary, yet a recent public opinion poll indicated that when New England residents were asked "how much, if anything, have you had heard about SBNMS," 76% indicated "not much/nothing at all" and 15% indicated "some." (Public Attitudes on Fully-Protected Ocean Areas in New England and Atlantic Canada, Edge Research, January 2002). As marine resource and conservation issues become more complicated, it becomes more important for citizens to know more about the marine environment and participate in management decisions.

The Sanctuary can and should do more to act as a focal point for education and outreach in New England and nationally. The revised management plan should reflect this and include actions to increase the Sanctuary's visibility. One such action could be establishing visitor centers in addition to the current two sites in Provincetown in other locations such as Gloucester, Boston, Portland, and Mystic, working in partnership with other institutions and organizations as much as possible to make efficient use of Sanctuary resources and leverage partnerships. The plan should consider actions to increase the Sanctuary's role in marine resource education through established programs and institutions such as the Gulf of Maine Marine Educators Association, the National Ocean Science Bowl, and regional colleges and universities. The plan should also provide for increased communication to the public building on existing Internet, publication, and other outreach efforts.

**(5) The Revised Management Plan Should Provide Adequate Administrative Resources And Enforcement To Successfully Implement Programs.**

The Revised Management Plan should include an itemized list of resources needed to support the fulfillment of the goals of the Sanctuary program and the SBNMS. For example, SBNMS has made progress in its ability to house its operations since 1992 by recently acquiring a former Coast Guard station. However, much remains to be done to upgrade the facility and provide other resources necessary for the Sanctuary to successfully carry out its programs. The revised management plan should reflect the Sanctuary's need

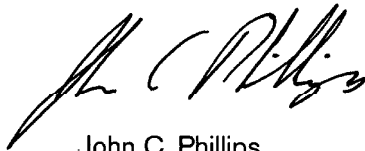
for the necessary platforms to carry out their programs, such as completed Sanctuary offices and meeting space, a larger research vessel to support research at this offshore site, and sufficient personnel to successfully implement Sanctuary programs.

Since 1992, the Sanctuary has developed cooperative enforcement arrangements with the Massachusetts Environmental Police and the Coast Guard Auxiliary, but there are still gaps in enforcement in this actively used Sanctuary. We encourage further development of shared enforcement authority with other agencies, but also believe that the revised management plan should consider establishing dedicated Sanctuary enforcement staff to fully support the Sanctuary's ability to protect resources and manage uses within its boundaries.

### Conclusion

The Stellwagen Bank National Marine Sanctuary is a national as well as a New England treasure. We urge the National Oceanic and Atmospheric Administration to conduct a comprehensive review of the issues raised in this letter to strengthen management of this site and protect it for future generations. Thank you for your consideration of these comments.

Respectfully,



John C. Phillips  
Director, New England Regional Office  
The Ocean Conservancy

cc:

Dr. Craig MacDonald, SBNMS Superintendent  
Senator Lincoln D. Chafee  
Senator Susan M. Collins  
Senator Christopher J. Dodd  
Senator Judd Gregg  
Senator Edward M. Kennedy  
Senator John F. Kerry  
Senator Joseph I. Lieberman  
Senator Jack Reed  
Senator Robert C. Smith  
Senator Olympia J. Snowe  
Congressman Thomas H. Allen  
Congressman John E. Baldacci  
Congressman Charles Bass  
Congressman Michael Capuano  
Congressman William Delahunt  
Congresswoman Rosa DeLauro  
Congressman Barney Frank

Congressman Patrick J. Kennedy  
Congressman James R. Langevin  
Congressman Stephen F. Lynch  
Congressman Edward J. Markey  
Congressman Robert R. Simmons  
Congressman John E. Sununu  
Congressman John F. Tierney  
Director Daniel J. Basta, National Marine Sanctuary System  
Management Plan Coordinator, Edward Lindelof, National Marine Sanctuary System



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
Northeast Region  
One Blackburn Drive  
Gloucester, MA 01930

Craig D. MacDonald, Ph.D  
Stellwagen Bank National  
Marine Sanctuary  
175 Edward Foster Rd.  
Scituate, MA 02066

go out Fed



Dear Craig:

Thank you for the invitation to comment on issues facing the Stellwagen Bank National Marine Sanctuary during its first Management Plan Review. There are many issues of mutual concern that should provide partnering opportunities between the SBNMS and NOAA Fisheries' Northeast Regional Office (NER) relating to habitat conservation, sustainable fisheries, protected species and research. For example, during the recent scoping hearings, several commenters expressed a need for benchmark information to determine whether sea floor habitat is deteriorating or recovering. Through close collaboration the SBNMS and NER can leverage existing resources in such investigations to maximize the research return. Such research may allow progress to be made, for example in providing a more narrow scientifically based definition of essential fish habitat, or to provide a baseline index of habitat health, water quality, etc. To proceed from research into management, we will need to develop the scientific basis to respond to the public's questions in these areas.

In your determination of the best way forward for the SBNMS, consideration might first be given to a "freeze" on new activities in the Sanctuary, which should provide some stability to sanctuary resources in the near-term. For instance, new uses, particularly those of an industrial or extractive nature, would have to demonstrate that they would not substantially affect the sanctuary's resources before they would be permitted.

At the scoping hearing attended by NOAA Fisheries staff, there were several questions on the authority of the SBNMS to restrict fishing activity and commercial shipping within the sanctuary. The SBNMS should seek NOAA General Counsel legal guidance on whether the SBNMS acting alone, can restrict these activities and under what circumstances. This was not addressed in the *Management Plan Review Update*, nor during numerous public scoping meetings, and seems to be a source of confusion, misinformation and perhaps, unnecessary contention. This is important information to provide to stakeholders and to the Sanctuary Advisory Committee as it deliberates a new plan.

In addition to the question of legal authority, NOAA's policy on how restrictions on fishing activity will be addressed should be made clear in the new plan. Historically in this region the Fishery Management Council has been considered the appropriate external venue for such actions. Restrictions on fishing activity would include, for example, protection of cultural resources from fishing gear. There are many reasons to adopt this as standard operating



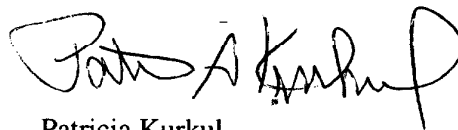
procedure, one of which is that fishers and other constituents can't be expected to spread themselves more thinly and often complain of the number of meetings requiring their attendance and resulting in lost work time. In addition, on regulatory issues, it makes good sense that there is "one NOAA voice." It is NOAA's responsibility to ensure that its separate line offices work internally to find the best ways to meet the goals of our respective programs.

Similarly, NOAA Fisheries shares with SBNMS concern for the welfare of marine mammals and endangered species within the sanctuary. We encourage the SBNMS to continue their support of existing regional efforts such as the North Atlantic Right Whale Consortium and the Atlantic Large Whale Take Reduction Team to improve NOAA's understanding of these animals and to better manage the human activities that effect them. Some additional areas for collaboration are:

1. Vessel strikes, harassment and behavioral disturbances - There are several ongoing Office of Protected Resources initiatives in these areas that would benefit from a stronger SBNMS and NOAA Fisheries linkage.
2. Speed limits - NOAA Fisheries has grappled with this issue; sharing lessons-learned and jointly exploring statutory authorities and outreach may offer new opportunities to protect endangered right whales.
3. Whale watching - Joint support for additional studies to investigate the effects of whale watching activities on whales may help address comments received during the first scoping exercise on whether densities and proximity of whale watching vessels interfere with whale feeding activity.
4. Sonic disturbance - Joint support for research to characterize the type of noise and levels in the Sanctuary.

Thank you again for the opportunity to comment. Working together should enable NOAA Fisheries and the Sanctuary Program to be more successful in administering our programs.

Sincerely,

A handwritten signature in black ink, appearing to read "Patricia Kurkul". The signature is fluid and cursive, with the first name "Patricia" and last name "Kurul" clearly distinguishable.

Patricia Kurkul  
Regional Administrator

Dr. Craig MacDonald  
Sanctuary Superintendent  
Stellwagen Bank National Marine Sanctuary  
175 Edward Foster Road  
Scituate, MA 02066

Sample  
PMMRL L  
(579)

Dear Dr. MacDonald:

The goals and purposes of the National Marine Sanctuary Program are "to facilitate to the extent compatible with the primary objective of resource protection all public and private uses of the resources of these marine areas not prohibited pursuant to other authorities." We believe that resource protection should be the focus of Sanctuary activities and that human uses must not interfere with the primary objective.

Stellwagen Bank is a biodiverse area and management decisions should be based on the ecosystem, not on fisheries, or species-specific issues. Congress designated the Stellwagen Bank National Marine Sanctuary as a National Treasure and it must be treated as a protected area and managed for the conservation of species as well as for the health of the ecosystem.

Decisions should be made utilizing global information, as many of the inhabitants of the Sanctuary are seasonal and migratory in nature. Therefore, it is essential that the Sanctuary not only coordinates with the regional and international communities, but the Sanctuary should also have a strong participation in Fisheries management activities that impact the Sanctuary ecosystem.

Decisions regarding the Sanctuary need to go through a well-publicized and extensive public hearing process in order to encourage a wide range of participants at all meetings. All public comments and management decisions should be available on the Sanctuary website. All Sanctuary programs should be available for review on an annual basis and should be posted on the Sanctuary website for public comment and input.

Currently there are a number of potential activities that could negatively impact the marine species that utilize the Sanctuary waters. We believe that critical issues are: (Check all that are important to you)

- ☒ Reducing fixed gear fishing activities in areas when whales are present to minimize the risk of whales becoming entangled in gear.
- ☒ Speed limits within the Sanctuary must be imposed to protect animals from ship strikes.
- ☒ Vessels should not be able to dump waste, pump bilges, or dump ballast within the Sanctuary.
- ☒ Activities that adversely affect the seabed should be prohibited within the Sanctuary.
- ☒ Fishing and recreational vessels must adhere to the same whale watch guidelines and policies as commercial whale watching vessels.
- ☒ Personal watercraft including, but not limited to, kayaks and jet-skis, are improper equipment for whale-watching within the Sanctuary.
- ☒ Enforcement of rules and regulations in the Sanctuary is essential.
- ☒ A monitoring program is essential to understand the current health of the ecosystem and to identify any changes before a problem becomes critical.
- ☒ The Sanctuary should have strong participation in Fisheries management activities and decisions that impact the Sanctuary ecosystem.
- ☒ The Sanctuary must lead by example by reducing waste through the use of recycled goods; alternative energy; and other methods of minimizing waste.

Sincerely, STEVE MORECRAFT

Street Address:

10 LARCH CLOSE  
KINGS WORTHY  
WINCHESTER  
HAMPSHIRE  
UK

Date:

9/21/02

City, State, Zip:

- ☐ I WOULD LIKE to receive information from the Sanctuary.
- ☐ Please do NOT add me to the Sanctuary mailing list.



John H Martin  
83 Hathaway St  
North Adams, MA 01247-2342

# CitizenLetter®

*An urgent message from a concerned citizen*

October 19, 2002

Katrina Van Dine  
Stellwagen Bank  
National Marine Sanctuary  
175 Edward Foster Road  
Scituate, MA 02066

Sample 974

Dear Ms. Van Dine,

I am writing to urge you to fully protect Stellwagen Bank's most vulnerable ocean and wildlife habitats in the new Marine Sanctuary Management Plan.

This amazing ecosystem supports a diverse range of fish, endangered humpback whales and 40 species of seabirds. Although the bank's location within the Sanctuary protects it from oil drilling, it doesn't protect it from ocean waste dumping, destructive trawling, extreme human overuse and excessive fishing. New measures are needed to ensure the long-term health of the bank's marine life and habitats.

The bank should be protected by restricting those activities that harm wildlife or damage habitat. Setting aside certain fully protected areas within the Sanctuary will allow the ecosystem to recover and provide a safe haven for threatened species.

The current review of the management plan for Stellwagen presents an excellent opportunity to increase protections for this extremely special ocean habitat.

Please tell me how you intend to address this important issue.

Sincerely,

John H Martin

**Subject: Support creation of fully protected areas within Stellwagen Bank National Marine Sanctuary**  
**Resent-From: [sbnmsplan@noaa.gov](mailto:sbnmsplan@noaa.gov)**  
**Date: 26 Jul 2002 14:41:08 -0000**  
**From: [<grandej@vinfen.org>](mailto:grandej@vinfen.org)**  
**To: [sbnmsplan@noaa.gov](mailto:sbnmsplan@noaa.gov)**

Superintendent Craig MacDonald  
National Oceanic and Atmospheric Administration  
175 Edward Foster Road  
Scituate, MA 02055

Dear Superintendent Craig MacDonald,

I am concerned about habitat destruction and excessive fishing pressure in Stellwagen Bank National Marine Sanctuary, and write to register my support for the creation of fully protected ocean wildlife and habitat areas through the Sanctuary's management plan review process.

Stellwagen Bank is a unique ocean ecosystem that sustains a rich diversity of marine life. Pollution, excessive fishing pressure, and damaging fishing practices threaten the well being of these distinctive creatures and critical habitats. Stellwagen Bank receives important protections as a national marine sanctuary; however, new measures are needed to help restore declining fisheries and preserve habitat.

Compelling scientific evidence supports the establishment of fully protected ocean wildlife and habitat areas as a way to address these problems. By leaving a portion of our coastal waters undisturbed, ocean wildlife and habitat areas can restore biological diversity and provide a safe haven for species now in decline. The resulting protected areas can also provide tangible, long-term benefits to fishermen. New England's economy and future depend on a healthy marine environment.

Please register my support for the creation of fully protected ocean wildlife and habitat areas within Stellwagen Bank National Marine Sanctuary.

Sincerely,

Jennifer Grande  
21B Anawon Road  
Plymouth, Massachusetts 02360

*Event  
Defense*  
*17000*

Total Count 430

Stronger Conservation Letter:

From: <dillherde@aol.com>

Date: Fri, 18 Oct 2002 12:44:42 +0800

Message-ID: <2139262.1034970811781.JavaMail.sean.ctsg.com@eug-app01>

To: sbnmsplan@noaa.gov

Subject: Stronger Conservation for Stellwagen Bank National Marine Sanctuary

Precedence: list

Resent-From: sbnmsplan@noaa.gov

October 18, 2002

Dear Craig McDonald ,

I would like to submit the following public comments as you prepare the revised management plan for the Stellwagen Bank National Marine Sanctuary. As New England's only National Marine Sanctuary, I feel it is vitally important to strengthen the existing management plan to ensure it achieves its primary purpose to protect the productive marine habitats and the myriad of marine life found within Stellwagen.

The existing management plan fails to regulate most commercial activities affecting the marine resources within Stellwagen =96 even those that are known to damage the seafloor and remove large amounts of marine life from the Sanctuary. Threats to the Sanctuary's resources include certain destructive fishing practices, which can damage the seafloor and locally deplete fish and important prey species, shipping traffic, and wastewater discharges from the greater Boston area. I believe that the new management plan should include measures to significantly reduce these threats. I would also encourage the Sanctuary program to initiate discussions within the community about establishing fully protected marine areas within the Sanctuary boundaries.

Sincerely,

Robin Dill-Herde  
379 Kent Cornwall Rd  
Kent, CT 06757

X

Stellwagen Bank National Marine Sanctuary  
MPR Coordinator  
175 Edward Foster Road  
Scituate, MA 02066

1281

September 2002

Dear MPR Coordinator:

**I am writing to ask that the Stellwagen Bank National Marine Sanctuary extend its boundaries to include the full length of Jeffreys Ledge as it revises its management plan in the coming months.**

Currently only the southern 1/3 of Jeffreys Ledge is included in the sanctuary boundary. It makes little sense to afford Sanctuary status to only this portion of what is, in its entirety, a critical marine habitat. Arguments to extend this protection to the remainder of the Ledge include:

- It is the most important spawning habitat for Gulf of Maine herring, which are a primary prey item for many marine predators including marine mammals, predatory fish, and commercially important ground fish;
- It is an important fall feeding habitat for northern right whales, one of the most critically endangered whales in the world;
- It acts as a "buffer" ecosystem to Stellwagen Bank in years when prey productivity is low in other portions of the Sanctuary;
- It is vulnerable to the effects of highly developed coastal cities, which in this case includes Portsmouth, N.H., and Portland, ME.

Including Jeffreys Ledge in the Stellwagen Bank Sanctuary would be a major stride towards protecting the marine resources of New England, and I encourage you to take this vital step.

Sincerely,

*Charles A. Mori*  
180 Post Road  
Greenland, N.H. 03840

Please **do / do not** (circle one) send me further information about the Stellwagen Bank Management Plan Review as the process continues.

Stellwagen Bank National Marine Sanctuary  
MPR Coordinator  
175 Edward Foster Road  
Scituate, MA 02066

Ruth LANHAM

P.O. Box 122

New Castle, N.H. 03854

September 2002

Dear MPR Coordinator:

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Sincerely,

*Ruth Lanham*

Please **do / do not** (circle one) send me further information about the Stellwagen Bank Management Plan Review as the process continues.